Amendment to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently amended) A fuel cell system, comprising:

a fuel cell stack comprising an anode, a cathode, and a solid polymer electrolyte membrane between said anode and cathode, said anode and cathode being each in contact with fluid, wherein the fluid in contact with said anode includes a methanol fuel which is substantially free of acid electrolyte liquid; and

a turbine, driven by pressure of one of an output fluid from said cathode that includes both liquid and gas ~~said fluids~~, and recycling pressure ~~in said one of said fluids~~.

2. (Previously presented) A fuel cell system as in claim 1, wherein said anode is in contact with pressurized gas, and said turbine is driven by said pressurized gas.

3. (Previously presented) A fuel cell system as in claim 1, further comprising an air compressor, driven by said turbine, and recycling pressure, driving said turbine.

4. (Previously presented) A fuel cell system as in claim 1, wherein said polymer electrolyte membrane is a proton conducting, solid polymer electrolyte membrane.

5. (Previously presented) A fuel cell system as in claim 1, wherein said anode includes an electrochemical catalyst thereon.

6. (Currently amended) A liquid feed direct oxidation organic fuel cell, comprising:

a fuel cell stack formed of an anode, including an electrochemical catalyst thereon, a proton conducting solid polymer electrolyte membrane, coupled to said anode, and a cathode, coupled to another side of said proton conducting solid polymer electrolyte membrane, said fuel cell stack capable of oxidizing liquid methanol without free soluble acid or base electrolytes; and

a pressure recycling device, operating to recycle pressure from a liquid and gas combination ~~in at least one fluid~~ which is in contact with said fuel cell stack.

7. (Previously presented) A fuel cell as in claim 6, wherein said pressure recycling device includes a turbine.

8. (Previously presented) A fuel cell as in claim 6, wherein said pressure recycling device includes an expander.

9. (Previously presented) A fuel cell as in claim 6, wherein said pressure recycling device is coupled to gases in contact with said anode.

10. (Previously presented) A fuel cell as in claim 9, further comprising a water/air separator, also coupled to gases in contact with said anode, operating to separate air from water.

11. (Previously presented) A fuel cell as in claim 10, further comprising a water recycling part, which feeds back water from the water/air separator to be reused in subsequent reactions.

12. (Previously presented) A fuel cell as in claim 11, further comprising a vent, allowing excess water to be removed.

13. (Previously presented) A fuel cell as in claim 6, further comprising a water recycling part, operating to recycle water from a cathode back to an anode.

14. (Previously presented) A fuel cell as in claim 13, further comprising a vent for excess water.

15. (Previously presented) A fuel cell as in claim 14, further comprising a controller, which monitors an amount of water in the system, and controls said vent for excess water to remove water when too much water is being recirculated.

16. (Previously presented) A fuel cell as in claim 6, further comprising at least one fan, driven by said pressure recycling device.

17. (Previously presented) A fuel cell as in claim 16, further comprising at least one pump, operating to pump methanol.

18. (Currently amended) A fuel cell system, comprising:

a fuel cell stack, including an anode, a cathode, and a proton conducting solid polymer membrane, connected between said anode and cathode, and connected thereto, wherein said anode is formed with an electrochemical catalyst, and a proton conducting material therein, and also being electrically conducting, and said cathode formed of a gas diffusion material which allows diffusion of gas;

a fluid feed system including a liquid methanol source, in contact with said fuel cell stack, and providing methanol to said fuel cell stack, which methanol is substantially free of any free acid electrolytes therein, and a gas source, providing gas to said cathode for an electrochemical reaction; and

a pressure device, coupled to receive a mix of liquid-gas material from said cathode, and to use ~~said fluid feed system, and using~~ pressure from said fluid in said fluid feed system in another system.

19. (Previously presented) A system as in claim 18, wherein said pressure device includes a turbine driven from pressure from said fluid feed system.

20. (Previously presented) A system as in claim 19, wherein said turbine is coupled to said gas source part of said fluid feed system.

21. (Previously presented) A system as in claim 18, wherein said pressure device is coupled to said gas source part of said fluid feed system.

22. (Previously presented) A system as in claim 18, further comprising a gas/liquid separator, coupled to said gas source part of said fluid feed system.

23. (Previously presented) A system as in claim 22, further comprising a water recycling part, feeding back liquid from said gas/liquid separator.

24. (Previously presented) A system as in claim 18, further comprising a pressure driven device, driven to receive its pressure from said pressure device.

25. (Previously presented) A system as in claim 24, wherein said pressure driven device includes a fan.

26. (Currently amended) A method, comprising:

operating a ~~direct fed methanol~~ fuel cell which operates with a liquid, [[an]] organic alcohol containing fuel;

receiving an output that includes both liquid and gas and

using a pressure from said output ~~one portion in said fuel cell~~ to drive a pressure-driven device.

27. (Previously presented) A method as in claim 26, wherein said using comprises using said pressure to drive another portion of the fuel cell.

28. (Previously presented) A method as in claim 26, wherein said one portion of the fuel cell is in contact with fluid used within the fuel cell.

29. (Previously presented) A method as in claim 28, wherein said one portion of the fuel cell is in contact with a gas supply to the cathode.

30. (Previously presented) A method as in claim 27, wherein said another portion of the fuel cell includes a fan driven by recycled pressure.

31. (Previously presented) A method as in claim 26, further comprising using the pressure to carry out another operation in the fuel cell.

32. (Previously presented) A method as in claim 26, wherein said operating comprises carrying out an electrochemical reaction on the methanol fuel cell using a methanol fuel which is substantially free of free acid electrolytes.

33. (Currently amended) A method, comprising:

supplying fluids to a direct fed methanol fuel cell stack, which fluids include at least one liquid which includes an anode, a cathode, and a proton conducting solid polymer electrolyte membrane between said anode and cathode;

carrying out an electrochemical reaction using fluids; and

receiving an output from said electrochemical reaction that includes both liquids and gas recovering pressure from the output ~~fluids fed by said supplying~~.

34. (Previously presented) A method as in claim 33, wherein said recovering pressure comprises using pressure from said fluids to carry out another operation in said fuel cell.

35. (Previously presented) A method as in claim 34, wherein said recovering pressure comprises using pressure from said fluids to drive a fan.

36. (Previously presented) A method as in claim 33, further comprising recovering fluids after the electrochemical reaction has been carried out, so that at least part of the fluids after the electrochemical reaction are fed back for a subsequent electrochemical reaction.

37. (Previously presented) A method as in claim 33, wherein said recovering pressure comprises using the pressure to drive a turbine.

38. (Currently amended) A fuel cell system, comprising:

a fuel cell stack, including an anode, a cathode, and a proton conducting solid polymer membrane, connected between said anode and cathode, and connected thereto, wherein said anode is formed with an electrochemical catalyst, and a proton conducting material therein, and also electrically conducting, and said cathode is formed of a gas diffusion material which allows diffusion of gas therein;

a ~~fluid~~ liquid feed system including a liquid methanol source, in contact with said fuel cell stack, and providing liquid methanol to said fuel cell stack, which methanol is substantially free of any free acid electrolytes therein, and a gas source, providing gas to said cathode for an electrochemical reaction; and

a fluid recycling device, coupled to ~~said fluid feed system, and receiving a fluid~~ receive a mixed gas-liquid material after reaction with the cathode, and recycling a pressure of said fluid, and a part of said fluid back to the anode.

39. (Previously presented) A fuel cell system as in claim 38, further comprising a liquid/gas separator, separating liquid parts of the recycled fuel from gas parts of the recycled fuel.

40. (Previously presented) A fuel cell system as in claim 39, wherein said liquid parts of the recycled fuel are fed back to the anode.

41. (Previously presented) A fuel cell system as in claim 38, further comprising a valve, which vents excess water if too much water has been recycled.

42. (Previously presented) A fuel cell system as in claim 38, further comprising a pressure recycling system, in contact with said fluid feed system, and operating to recycle pressure within the fluid feed system by receiving pressure therefrom, and providing recycling pressure to carry out another operation in the fuel cell.

43. (New) A system as in claim 18, wherein said pressure device includes a gas/liquid separator, separating liquid from gas in the material received from said cathode, and recycling pressure based on gas in the mixture.

44. (New) A method as in claim 26 wherein said using a pressure comprises separating liquid from gas, and recycling pressure from the separated materials.

45. (New) A method as in claim 33, wherein said recovering pressure comprises separating liquids from said gas in said output, and recycling pressure from the separated materials.

46. (New) A system as in claim 38, wherein said fluid recycling device includes a liquid/gas separator, separating liquid from gas, and recovering pressure from the separated materials.